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ABSTRACT

This paper explores some of the obstacles to implementation of tests required for graduation by describing state programs in existence as of October 1994 in which students were required to pass a test in order to receive a high school diploma. A survey of state testing directors used to construct the State Student Assessment Program Database was supplemented by telephone surveys and interviews with state and local education officials in the states reporting use of high school graduation tests. The push for including more complex skills and setting higher standards on graduation tests is perhaps the fundamental dilemma states face in developing or modifying their programs. However, as of October 1994, 18 states operated some form of high school graduation test. These states tend to be located along the southern and eastern coasts. Most state testing programs assess students in grades 10 or 11 with a criterion-referenced test and a writing sample on the subjects of reading and mathematics. Every state relies on multiple-choice tests, primarily due to the high-stakes nature of these tests and the related technical quality issues. There is no single model followed by all states, but all have faced similar legal and educational challenges in the implementation of their programs. Recommendations are made for the design or implementation of state testing programs. An appendix lists state graduation testing programs. (Contains 27 references.) (SLD)

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ED 402 329

State High School Graduation Testing: Status and Recommendations

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State High School

Graduation Testing:

Status and Recommendations

November, 1995

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Introduction

For most Americans, graduating from high school has meant taking courses in math, social studies, English, science, and a number of electives to meet state requirements for Carnegie units.[1] However, students in 18 states across the country face an additional challenge to receive their diploma: passing a state-mandated test.

Most of these states are requiring graduation tests to ensure that, in addition to "seat" time,[2] students can demonstrate an agreed-upon level of knowledge and skill in order to graduate. While this may seem like a fairly straightforward proposition, implementation of the policy is quite complex. States must:

- Determine what knowledge and skills are essential and what level of learning will be considered "sufficient."
- Guarantee that all students will have the opportunity to master the required knowledge and skills.
- Prevent the minimal level of skills from becoming the maximum that everyone strives for and is satisfied with.
- Most important, determine what will happen to students who do not pass the test.

How a state decides to address these issues dictates the design of each state's program. This design is critical to both the success of the program and its ability to withstand legal challenges.

Given the hurdles states must clear in developing their programs, they must consider the benefits and tradeoffs that accompany each program design option. This paper will explore some of those obstacles by describing state programs in existence as of October of 1994 in which students were required to pass a test in order to receive a high school diploma. In particular, this paper will shed light on the history of these programs, describe what they look like, analyze the forces that shape and direct their design, and explore the extra assistance students receive to help them pass the test. We close with a summary of our findings and conclusions, and a series of recommendations for those who are contemplating implementing or modifying a high school graduation test.

In conducting our investigation, we relied heavily upon a survey of state testing directors in the 50 states and the resulting State Student Assessment Program Database (CCSSO & NCREL, 1995). Supplementary surveys and telephone interviews were also conducted with state and local education officials during the summer of 1995 to gather current information from the 18 states reporting the use of high school graduation tests.[3] As is the case with any summary that relies primarily upon self-report, the conditions described for each state are dependent upon the accuracy of those reports.

A Brief History of State Graduation Testing Programs

The first state graduation testing programs began to appear during the late 1970s and early 1980s. Employers and college faculty expressed concern that high school graduates often lacked "the basic knowledge necessary for successful job training or acceptable college work" (Ogden, 1979). Many critics began calling for a renewed focus on a core set of basic skills, charging that the curriculum had become "watered down."

This criticism reverberated nationally and, in an attempt to tighten control over what was being taught to students, states implemented minimum competency tests. These tests would signal to schools and students the minimum level of performance on a core set of "basic" skills that must be taught and learned.[4] Florida was one of the first states to develop a minimum competency graduation test and was also one of the first to have to defend its testing program in court. A group of African-American students who had failed the state test challenged its constitutionality, declaring it racially biased.[5] In this precedent-setting case, the court ruled that graduation testing programs are legal as long as: the test measures skills that are being taught in the state's schools; the students are given sufficient notice of the test and its expectations for passing; and the test does not intentionally foster discrimination against a protected group (Phillips, 1993). Florida's program met these criteria. This ruling came in the late 1970s, when graduation testing was in its early stages of development, and set forth the initial set of legal standards to which programs must be held.

Graduation tests became even more common after the release of two government publications, *A Nation at Risk* in 1983, and *What Work Requires of Schools: Secretary's Commission on Achieving Necessary Skills* (SCANS) in 1991. These publications provided states with added incentives to influence what their students learned. In *A Nation At Risk* (1983), the National Commission on Excellence in Education (NCEE), a panel appointed by the U.S. Secretary of Education, reported that while students possessed "basic skills," they lacked the more advanced skills necessary for the emerging technological society. Using results from the National Assessment of Educational Progress, the report concluded that "Many 17 year-olds do not possess the 'higher order' intellectual skills we should expect of them. Nearly 40 percent cannot draw inferences from written material; only one-fifth can write a persuasive essay; and only one-third can solve a mathematics problem requiring several steps (NCEE, 1983, p. 9)." The report went on to explain that "business and military leaders complain that they are required to spend millions of dollars on costly remedial education and training programs in such basic skills as reading, writing, spelling, and computation. The Department of the Navy, for example, reported to the Commission that one-quarter of its recent recruits cannot read at the ninth-grade level, the minimum needed to simply understand written safety instructions. Without remedial work they cannot even begin, much less complete, the sophisticated training essential in much of the modern military" (NCEE, 1983, p.9).

Subsequent to the release of this report, eight states implemented high school graduation testing programs. For the most part, however, the states responded to the report's concern that graduates did not have the basic skills of reading, writing, spelling, and computation rather than on its call for students to learn new, more complex skills needed for a technological society. States may have done this for two reasons. First, these lower-level skills were easier to test; second, the more advanced skills were as of yet not well defined, and ways to assess them were considered unreliable (Linn, 1995).

The 1991 release of *What Work Requires of Schools: Secretary's Commission on Achieving Necessary Skills (SCANS, 1991)* refocused the scrutiny on the lack of higher-level skills among graduating seniors. This Department of Labor report affirmed the findings of *A Nation at Risk* by concluding that high school graduates lacked the more complex skills needed to succeed in the high-tech, problem-solving workplace of the future. It further defined the more advanced skills first mentioned in *A Nation at Risk*. Three more states implemented their programs after the release of the *SCANS* report, and many states with existing programs began to look critically at the level of skills assessed in their high school graduation tests.

The Fundamental Dilemma for States

The push for including more complex skills and setting higher standards on graduation tests is perhaps the fundamental dilemma states face in developing or modifying their programs. States have really struggled with this, especially where technical and legal issues are concerned (Koretz, Klein, McCaffrey & Stecher, 1993). More complex skills generally require more complex assessments,[6] which to date have not demonstrated the same degree of technical quality as more traditional multiple-choice tests.[7] It is easier, for example, to ensure the uniformity of scoring on a multiple-choice, machine-scored test than an essay exam or a portfolio of student work. The commonly accepted procedures for determining technical quality have been designed for multiple-choice assessments, and complex, constructed-response assessments[8] are considerably different. Research is under way to improve our techniques for ensuring the technical quality of these more complex assessments (UCLA/CRESST Annual Conference, 1995). Still, if a test is challenged in court, the state must demonstrate that the assessment has sufficient technical quality to deny students the economic benefits of a high school diploma (Phillips, 1993). Thus, the lack of demonstrated technical quality has kept states from extensively using alternative or performance assessment for high school graduation purposes.

States wanting to address more complex skills in their graduation exams face the challenge of guaranteeing that all schools are teaching those skills (or at least say they are). States are therefore caught in a Catch-22. Prior to high-stakes testing, a state must ensure that the curriculum and instructional programs reflected by the test are already in place. Without this, the state cannot prove curricular validity, a necessary condition for legal defensibility of the test. However, curriculum and instructional reformers

want to use the state test to force a change in the way students are taught and in the complexity of the skills they are taught. Clearly, a test cannot both lead the curriculum and reflect the curriculum at the same time. This is the Catch 22. Add to this the technical quality issues these newer, more complex assessments face and it is clear why states are struggling.

Keeping these dilemmas in mind, we will now turn to an examination of state graduation testing programs, how states develop them in the face of trying to raise standards, and the resulting technical and legal challenges.

Purposes and Target Audiences

States have many reasons for developing graduation tests; most commonly, they want to ensure that students leave school with the knowledge and skills needed to be successful in life. However, as technology continues to transform our world, the level of skills required to be successful keeps rising. This, in turn, is forcing states to consider raising the minimum level of skills they require students to have when they graduate. For many states, the graduation test is also seen as a way to redefine what it means to graduate from high school. A high school diploma no longer signifies just the successful completion of a state- or locally mandated number of courses as determined by local standards; rather, it now also means that a student has learned a minimal set of skills as determined and certified by the state. In addition, a student is not denied a diploma; rather, receipt of the diploma is merely delayed until the student has had ample opportunity to learn the skills and pass the test (Trent, 1995). In most states, the student is allowed to retake the exam as many times as it takes to pass, including several years after the student has completed high school coursework.

To make all of the modifications necessary in schools to change what and how students learn, systemic reform is necessary. Proponents of systemic reform argue that all elements of the educational system must work together for reform to be successful. Simply changing the test is not enough. Curriculum content, instructional strategies, student work habits, school governance and organization, and professional development approaches must all change. Therefore, states generally target students, schools, and curriculum and instruction in their reform efforts. In fact, two-thirds of the 18 states with graduation tests specifically target all three elements. States encourage students to learn the necessary skills by requiring them to pass a test in order to receive their diplomas. States make schools accountable for their results by reporting them publicly or by considering a school's results in the accreditation process. Furthermore, states influence teachers and the curriculum by specifying which skills will be included on the test.

Basic Program Facts

As of October 1994, 18 states operated some form of high school graduation test. (See the Appendix for a list of these states and the names of their programs.) There is a curious pattern to the geographic location of the states, as Figure 1 illustrates: They are primarily located along the southern and eastern coasts of the United States. One possible explanation is that the southeast traditionally has ranked near the bottom of the states on National Assessment of Educational Progress (NAEP) scores, college entrance tests such as the SAT, and other indicators of educational status (former Educational Secretary William Bennett's Wall Chart). It is therefore likely that the policymakers in those states would feel compelled to implement programs designed to improve the achievement of their students and, as a result, the standing of their states in national educational rankings.

Figure 1
States with Graduation Tests and Types of Diplomas Offered

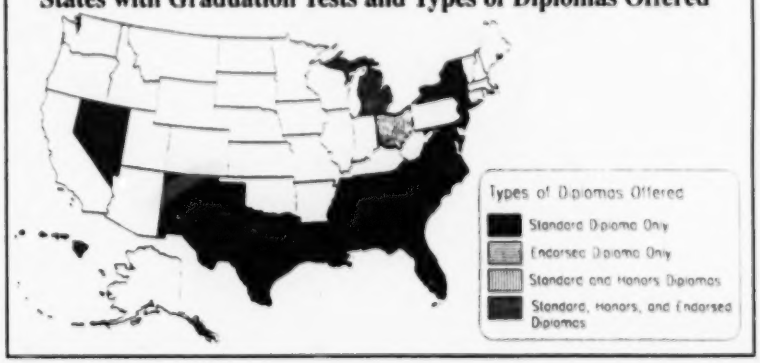

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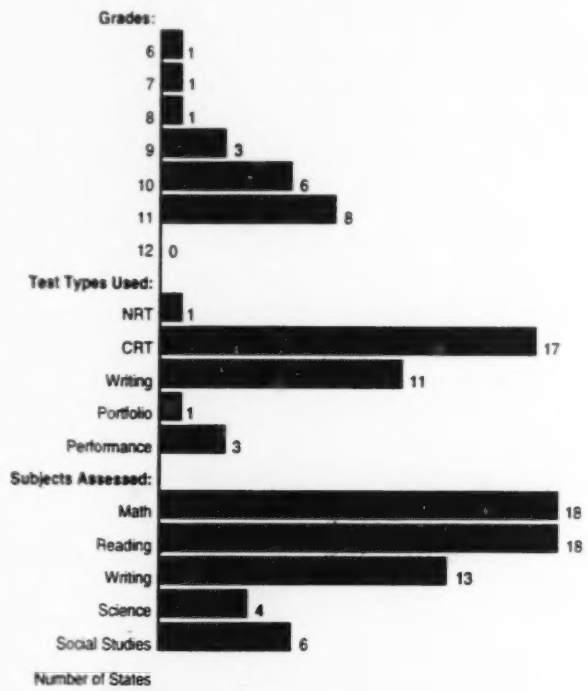
Chart 1 provides some basic information about state graduation testing programs. The average state testing program assesses 10th- and 11th-grade students with a criterion- referenced test and/or a writing sample on the subjects of reading and math. The grade at which students are tested for the first time is important because it tells us how much time students have to prepare for the test and the level of skills that can be included on the test. Students who do not pass in the first administration also need sufficient time to acquire the necessary skills and retake the test. The range of grades tested initially is very broad—from 6th grade through 11th grade. Virginia assesses its sixth graders "to allow time for students to develop the skills they need before going on to high school. In high school, the emphasis is on using reading, writing, and mathematics skills to learn, not learning to read, write, and compute. Therefore, students need to have mastered the basics to do well in other subjects such as chemistry, government, and English" (Virginia Department of Education, 1995). At the other extreme, New Jersey tests students for the first time in the 11th grade, but administers an early warning test to 8th graders to identify students at risk of not passing the final test and to provide opportunities for early remediation. When first administered, New Jersey's Proficiency Test was given to ninth graders. In an effort to raise the standards expected for graduation, the test was redesigned for 11th graders.

The chart also shows that every state relies on multiple-choice tests, primarily due to the high-stakes nature of these tests and the related technical quality issues. All states with a graduation test but one use a criterion-referenced test[9] where the cut score for passing is determined by the state board of education (Klein, 1995). Only Nevada uses a norm-referenced test[10] (not a nationally normed commercial test, but rather one developed by Nevada in 1990 and normed on Nevada students). This test will be replaced by a new criterion-referenced high school proficiency test in math and reading that will be pilot tested during the 1996-97 school year (NCREL & CCSSO, 1995).

Chart 1
Grades Tested, Test Type Used, and Subjects Assessed



Note: Grade refers to the grade at which students are initially tested; New York tests different grades initially for different subjects

Of the alternative assessment types (writing, performance assessments, portfolios) used, writing assessments are the most common. Even though they are considered as alternatives, writing assessments have existed long enough for their scoring techniques to have withstood technical challenges. Performance assessments and portfolios are used less often, partially because their technical quality is still undergoing scrutiny from the education community, and partly because they are costly to implement. One example of how a portfolio is used can be seen in New Jersey, where portfolios are created as an alternative assessment for students who do not pass the test in their first attempt.

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Types of Diplomas Offered

While most state programs target those students at risk of graduating from school without basic skills, they do little to motivate high-achieving students. To encourage students to excel, four states provide opportunities to earn two types of diplomas in addition to the standard diploma. These states offer honors and endorsed diplomas. An honors diploma is awarded based on high performance on the assessment; an endorsed diploma, which has a special seal, is based on satisfactory performance on the assessment. In all states except Michigan with high school graduation tests, a standard diploma is awarded to all students who pass the state exam. During the 1993-94 school year, students in Michigan received a standard diploma based on Carnegie units, but could have received an endorsed diploma by performing satisfactorily on the test. (Michigan is in the process of developing a new high school proficiency test which may be used for endorsement.) Students in Ohio, in addition to the standard diploma, can earn an honors diploma; students in New York and Tennessee can earn a standard, honors, or endorsed diploma.

It is important to keep in mind that these are generalizations drawn from the 18 different programs discussed here. In fact, each state's test has a unique design and is intended to accomplish slightly different purposes. Our generalizations are not meant to hide the uniqueness of the various programs; rather, they are meant to provide a base knowledge about what states are doing. It is imperative that each program be unique in order to accommodate the various needs of the individual states. However, this uniqueness has a negative side: It makes it difficult to claim graduation testing programs are either successful or unsuccessful.

Preparing Students to Pass the Test

If a state's purpose in developing a graduation test is to assure that all students possess a certain level of skills before they receive their high school diplomas, then it can be argued that it is the state's duty to provide students every opportunity to become proficient in the skills to be assessed.[11] For the purposes of this paper, additional assistance provided to students to help them pass the exam will be considered as remediation. Because states differ in the guidelines they place on remediation and the funding they provide for it, remediation programs in schools vary considerably in nature, purpose, and source of funding both across and within states.

Generally, there are at least two types of programs local school districts and/or schools employ to help their students pass the graduation test. The first kind tries to increase student and parent awareness of the test and what is expected of them; the second, remediation, provides additional or supplementary instruction to help students acquire the skills they need.

Awareness

Increasing awareness can be a valuable tool to prepare students to take the exam for the first time. Educational researcher James Catterall emphasizes the importance of awareness if a graduation test is to contribute to student performance through motivational or diagnostic mechanisms. But when Dr. Catterall examined the awareness level of students in schools in several states where a high school graduation test was required, he discovered that only about 50 percent of the students even knew about the test (Catterall, 1991).

One city that has adopted awareness as an element of its remediation program is Akron, Ohio. A focal point of the Akron program is a cable television program in which teachers help prepare students for the types of skills that may appear on the exam. As the date of the exam nears, students may call in and receive help on specific questions or problems. Various members of the community record the lessons on videotape, which is then later used in tutorial programs. An underlying belief of the program is that learning expands beyond the classroom, and parents cannot realistically provide all the help students need by themselves (Stubbs, 1995). Therefore, the cable program is meant to help parents by making the entire community aware of the test, the demands it places on students, and ways members of the community can help students acquire the required skills.

Another example can be found in the Dade County, Florida, school system, which experimented in 1994 with awareness as a strategy for increasing its passing rate of 59 percent. The strategy there was to heighten students' awareness of the exam before they took it for the first time. The test was administered

on a Saturday, when students would be free of distractions caused by changing classrooms, completing homework, and after-school activities. The key to making this successful was support from the entire community, which heightened awareness of the test for everyone, from students to parents to community members. Results indicated that the passing rate, which had been stagnating or declining for nearly a decade, jumped seven percentage points to 66 percent passing (Visiedo, 1994, p. 34-5).

Remediation

Apart from increasing public awareness, the other way schools help students to ultimately pass graduation tests is through remediation, chiefly by providing instruction to students on the test content they failed. While some may fail a test because they did not take the exam seriously, many more students do not pass simply because they lack the required skills. Many variations in remediation programs exist, from one-on-one tutoring, to self-tutoring computer programs where students pace themselves, to more traditional classroom environments where one teacher or tutor simultaneously assists many students.

The individual tutoring approach is being tried in the Portage County schools in Ohio. Students from Kent State work one-on-one with students from Portage County schools. Portage students volunteer to participate in the program; those who do not take part are involved in other intervention programs in their home school (Lyons, 1995).

An example of how computer technology is being used to help students is a program in Jackson County, Ohio. The Oak Hill High School built mini-labs into existing ninth-grade classrooms so that there is one computer for every three students. In addition to receiving individual attention from teachers, students work through almost 60 self-tutorial programs ranging from fifth-grade math to algebra and geometry. The use of these labs has been incorporated into everyday instruction and serves as a supplement to more traditional remediation in specific subject areas such as math and citizenship. The program has been quite successful; no student has failed to graduate because he or she did not pass the Proficiency Test. In fact the percentage of students passing all four tests the first time or three of the four tests rose from 32 percent the first time the test was administered in 1990 to 70 percent in the 1994-95 school year (Haynes,1995).

Funding

Sufficient funding is key to a successful remediation program. Extra classes, tutors, and paying for resources such as books and supplies can be an expensive undertaking. This expense can be especially burdensome for disadvantaged areas that can barely afford the essentials needed to run a school, such as teacher salaries and instructional materials. Allocating additional funds to support remediation may be impossible, however important it is for students. Therefore, especially in disadvantaged areas, having additional funding for remediation is essential.

Only 7 of the 18 states, however, earmark funds to either schools or districts expressly for this purpose. (See Chart 2 for a list of these states.) Two states that do not provide funds directly for remediation, New Jersey and Texas, allow schools and districts to use federal Title I dollars and other compensatory funds in local remediation efforts. In Ohio, unexpended GED/Adult High School state funds were redirected to the 1994 state-funded summer proficiency intervention programs. In Florida, remediation, while not a separately funded category, is figured in the basic funding formula for schools (Florida DOE, personal communication, 1995).

Chart 2

States That Fund Remediation

Georgia	Ohio
Hawaii	South Carolina
Louisiana	Virginia
North Carolina	

An interesting note about remediation is that states were more likely to allocate dollars to programs if they began in the late 1980s or early 1990s rather than in the late 1970s or early 1980s. Of the six states that developed their programs around 1980,

only one provided for state funding; however, 6 of the 10 programs implemented around 1990 provided state funding. Perhaps the shift indicates an awareness on the part of state policymakers that additional support is needed to provide this essential service to students, or perhaps it is because older programs have had more opportunity to become embedded in everyday activities at the school level (newer programs may require schools to do extra work to prepare students for the skills on the test).

Generally, the states that do provide funding to local districts and schools allow them to determine the content and structure of the program. There are, however, a few states that at least provide guidelines for their remediation programs. Districts in Virginia develop an individualized Literacy Development Plan for students who do not pass all three parts of the Literacy Passport Test by the end of the eighth grade. This Plan specifies instructional strategies and delivery methods that will be used with the student. The state of Georgia funds summer school for students who fail any of the five required tests. Local school systems decide how to structure their programs and how the funds will be used within state guidelines. The state of Ohio directs two: Project PASS, in which education, business, civic, social, and religious groups across the state work with students to enhance other ongoing remediation efforts; and Operation Extend, which targets special programs such as summer school and vocational education to members of the graduating class who have met all requirements for graduation except passing the Ohio Ninth Grade Proficiency Tests.

The interesting thing to note about most of the programs discussed in this section is that they have not relied on state funds, but rather have tapped alternative sources of funding. The cable program in Akron is supported by a bank in the area and the community's cable system. The Portage County tutoring program had a very low cost since students from Kent State volunteered their time as part of a community outreach program, while McDonald's purchased the necessary instructional materials and donated them to the students in the program. Jackson County, a disadvantaged rural area, was able to fund its computer lab through a technology grant.

Misdirected Remediation

One concern about remedial programs is that the focus on learning may become secondary to raising students' scores on the test. "Teaching to the test" is a concern states have vocalized about the remediation programs their schools have developed. While ensuring that the content on the test is included within a school's instructional program only makes sense, there is some evidence that the intense drill and practice that goes on prior to testing or retesting may raise test scores but not raise the student's level of understanding of the material. "When stakes are high, a heavy emphasis is sometimes placed on specific test results, and especially on increasing scores. The symptom—low test scores—is treated without affecting the underlying condition—low achievement" (U.S. Congress, 1992, p. 14).

Some states, such as Nevada, expressed concern that these programs were little more than "cram sessions," and Texas feared that some students receive excessive practice on specific areas that are assessed. If students only learn the content of the test in the way the test asks for the information, they may lack any real conceptual understanding of the content and may not be able to demonstrate the skill in contexts other than the one on the test (U.S. Congress, Office of Technology Assessment, 1992). Testing students initially in the later grades may promote misdirected remediation, as students have less time for remedial instruction prior to graduation.

Evaluating Success

It is difficult to make conclusions about the success of graduation testing programs as a whole, primarily because there is so much variety between states in program design and specific purposes, and because there are so few common achievement indicators that are consistent across states. However, each state's program can be considered individually to evaluate success; in fact, this situation may even be preferable given the uniqueness of the programs. More established arrangements, such as in Florida and New York, are a fact of life for schools, and instructional/remedial programs have had more time to gain momentum than would be the case with newer programs. Therefore, it is unfair to fault a state with a

new program for a lower initial passing rate as long as the passing rate improves after remediation.

Indicators that could be used to evaluate graduation testing programs include increased proportions of students passing the test on the first administration, which could indicate improved preparation; the number of 12th graders who have passed the exam as a proportion of the number of students who initially took the test; and the performance of the higher-scoring students on measures such as the SAT and ACT to ensure that students are not being adversely affected by the testing program (i.e., the curriculum is not being weakened).

Another issue to consider when determining the success of graduation programs is that states have a long history of using graduation tests for two, often conflicting, purposes: to ensure minimal levels of competency among graduates and to send a message to schools and students about what is important to teach and learn. Tests that identify students who do not attain the minimum level of skills in order to help them improve those skills before they graduate should be very different from tests that encourage schools to raise standards and expand what they teach. Tests with the first goal require a lower level of skills since the purpose is to catch those students not attaining above a low level; the second goal requires higher-level skills that will force students to challenge their abilities. Determining the success of the program will be dependent upon which of these two goals, if either, is being met.

While both of these goals are reasonable and have their own merits, to include them in a program together can seriously jeopardize the success of the program. For example, a few states attempting to accomplish both goals expressed concern that their standards were too low, and once the vast majority of students attained those standards, progress stagnated. However, it does appear that the definition of "minimal" competency is changing, as many states in the State Student Assessment Programs Database described efforts to raise the standards covered by the test (CCSSO & NCREL, 1995). The definition is being broadened to include more complex skills in addition to the "basic" reading, writing, and arithmetic skills of the past, and states are addressing the subsequent "fundamental dilemma" described earlier, of how to develop an assessment that measures higher-level skills and yet has curricular validity.

Conclusions

The major conclusion we draw from our examination of the 18 state graduation testing programs is that there is no single model that all states follow. Some have decided to focus on very low-level basic skills tests, given in the sixth, seventh or eighth grades, in order to ensure that students have the requisite skills needed for successful high school work. Others have moved toward more rigorous tests, administered at the 11th-grade level, in an attempt to graduate students from high school with high levels of skill. Still others offer a middle-of-the road test that combines the purposes of the other two. Any definitive statement about "high school graduation testing programs" cannot be made without acknowledging these fundamental differences in design and purpose. A follow-up study that looks at each state's program in some depth and at indicators of success for the students involved (e.g., state test results, dropout rates, or successful post-secondary placement in a job, the military, a technical training institution, or college) would certainly help to answer the question, Do these programs work?

Another significant finding was that all of the states face similar legal and educational challenges in the implementation of their programs. Tension between the educational goal of raising standards for all students and changing educational practice so that students may achieve those higher standards, and meeting legal challenges to the program in court, cause difficulty for almost every state surveyed. Legal constraints limit the types of skills that can be included in the test to those that are already taught in the classroom. Attempting to use the graduation test to raise standards and to change curriculum and instruction is difficult because the standards and curriculum and instruction must be in place prior to testing. Otherwise, students do not have sufficient notice of what is expected of them and do not have sufficient opportunity to learn the material.

Still, it is clear that the experiences of these states provide insight into the complexities of designing and implementing high school graduation tests, particularly in terms of the constraints encountered and the decisions that must be made. We are hopeful that these insights will help other states and school districts that are considering the development of a high school graduation testing requirement.

Recommendations

Based on our examination of state high school graduation testing, following is a list of issues agencies should keep in mind when designing or implementing these programs:

1. Once the decision is made to implement a graduation test, *the purpose of the program should be made crystal clear and should drive the design of the test.* This is particularly true concerning the conflicting goals of (a) identifying students who have not yet acquired the requisite or essential skills and (b) raising standards for all students. If the primary purpose of graduation tests is to identify students who have managed to struggle through school without sufficient skills and to get them the help they need, then a test of essential skills and a fairly low standard would be appropriate. However, if graduation tests are intended to raise standards, they will need to include more high-level, complex skills and require a higher level of performance to pass. In either case, gradually raising the level of skills included in the tests and the minimal passing score over time is appropriate.

2. An important element to carefully consider when developing graduation tests is *the determination of the passing score. It needs to be high enough to be challenging, yet not so high that it is impossible to attain.* One strategy some states have adopted to avoid minimum standards from becoming maximums and to motivate students to reach for higher standards is to offer honors and/or advanced diplomas. "We need multiple standards that set expectations to match different aspirations and achievements. A single standard would either have to be set low enough for most to pass, which does nothing to raise student achievement, or too high for many to reach, which only turns students off to the idea of hard work. The trick is to set standards that are within reach yet still require dedication and hard work—to stretch all kids to their maximum potential" (American Federation of Teachers, 1995, p. 70).

3. As states are moving towards incorporating more complex skills on their graduation tests, *it is essential to recognize that more is required than simply changing the test if standards are to be raised.* States must also afford schools and teachers the opportunity to include these more complex skills in their instructional plans prior to holding students accountable. Time for planning and professional development opportunities are key.

4. If states want to change what is taught, *they should consider mandating those changes in a core state curriculum that is publicized and accepted prior to testing.* A graduation test cannot be the first notice to schools about what the state believes is important for students to learn. Sufficient time must be given to schools to incorporate new learning goals for students into their curriculum so that when students are held accountable for these new goals, they will have been provided with appropriate instructional opportunities prior to being assessed (Mehrens, 1992, 1995).

5. *The community is a resource that should be considered in developing graduation testing programs. Many programs have been very successful at uniting community support for education.* The threat of a withheld diploma has inspired many in the community to provide support to students to help them pass the test and receive a diploma. This paper just mentioned a few of the ways that communities have helped — remedial programs, one-on-one tutoring, self-tutoring computer programs, cable T.V. programs, and Saturday classes. This supports the notion that education is not the sole responsibility of the school; rather, involvement by the community forms a support system that can have an impact beyond the graduation test. In this paper we have described some local programs that gained the support of the community in a variety of different ways, most commonly financial.

While some states do not provide additional, specific funds to schools for remediation, several schools have found ways to obtain alternative financial and in-kind resources from the community. Examples include the voluntary tutors from Kent State, the Jackson County technology grant, and the donation of instructional materials by McDonald's. Hopefully these examples will help guide schools as they struggle to find ways to develop and fund their remediation efforts.

Endnotes

1. A Carnegie unit refers to the number of credits or units a given course is worth. In addition to attendance requirements, most states require students to earn a certain number of Carnegie units to graduate.

2. "Seat" time refers to the requirements for students to have passed a sufficient number of classes to graduate. States also have attendance laws in place that require students to attend school until age 16 or 17. Students therefore can receive a diploma by attending school and passing the required number of courses. Because requirements for passing classes vary so widely, there is no guarantee that students have learned a "minimal" amount of content. High school graduation tests were implemented to ensure that student "proficiency" is externally determined.

3. Our thanks to all of the state assessment directors who provided the information included in this paper. Without their assistance, this paper would not have been possible.

4. Although often used interchangeably, there is a significant difference between the terms "basic skills" and "minimum competency." Basic skills typically refer to basic reading, writing, and computation skills. These basic skills are commonly taught through repetitive exposure to and practice with these skills in order to foster memorization, but not necessarily conceptual understanding (The National Commission on Excellence in Education, 1983; Resnick and Resnick, 1992; and Rothman, 1995). Higher level skills include comprehension, verbal reasoning, argument analysis, hypothesis testing, problem solving, and drawing conclusions (National Center for Education Statistics, 1994). "Minimum competency," on the other hand, refers to the level of performance a student must demonstrate on some set of skills (basic or advanced) in order to be declared minimally competent. This minimum level of performance may include both basic and higher level skills and can be set at a low or high level.

5. Debra P. v. Turlington, 474 F. Supp. 244 (M.D. Fla, 1979), aff'd in part, rev'd in part, 644 F.2d 397, 6775 (5th Cir. 1981); on remand, 564 R. Supp. 177 (M.D. Fla, 1983), aff'd, 730 F. 2d 1405 (11th Cir. 1984).

6. By complex assessments we are referring to those assessments that require the student to produce a response, rather than simply select a correct answer. Performance assessments, essays, and portfolios are examples of complex assessments.

7. By technical quality, we are referring to those safeguards that ensure that the test (1) provides scores that are an accurate reflection of the student's work (rather than a reflection of the scorer's bias or the confused wording of a question); (2) contains tasks and/or items that allow the student to demonstrate the knowledge and/or skills that are of interest (rather than some superfluous skills such as following directions, or a different content area skill such as reading ability when you're trying to assess science knowledge); and (3) provides fair scores that are not unduly influenced by the test takers' race, gender, or religion (Linn, Baker, & Dunbar, 1991).

8. "Constructed-response" assessments require the student to generate a response to a question or prompt. With more traditional multiple-choice tests, also called "selected-response" assessments, the student can select an answer from among several choices. Since complex skills rarely require a short answer that could fit a multiple-choice format, "constructed-response" assessments are being used more widely for assessing these skills.

9. Criterion-referenced tests (CRT) are designed to compare a student's test performance to clearly defined learning tasks or skill levels. The student's results are explained in terms of mastery of specific content and skills (e.g., he typed 45 words per minute without errors) (U.S. Congress, 1992).

10. Norm-referenced tests (NRT) are designed to describe a student's test performance as it compares to the performance of other students. A student's NRT results would be explained in terms of how the student's performance on the test compared with that of other students who also took the test (e.g., she typed better than 90 percent of her classmates) (U.S. Congress, 1992).

11. It can also be argued, and has been in many states, that the responsibility to teach students is a local, district responsibility. Additional funding is not, according to these states, necessary.

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Appendix

State Graduation Testing Programs

State program names, year program implemented, and authorizing body

State	Name of Program	Year Implemented	Who Initially Authorized
Alabama	High School Basic Skills Exit Exam	1985	State Board of Education
Florida	High School Competency Test	1977-78	Legislature
Georgia	High School Graduation Test	1992-93	Legislature
Hawaii	Test of Essential Competencies	1979	State Board of Education
Louisiana	Graduation Exit Examination	1988-89	Legislature
Maryland	Functional Testing Program	1981	State Board of Education
Michigan	High School Component of MEAP	1991	Legislature
Mississippi	Functional Literacy Examination	1988-89	Legislature
North Carolina	North Carolina Testing Program	1992-93	Legislature
New Jersey	Grade 11 High School Proficiency Test	1993	Legislature
New Mexico	High School Competency Examination	1987-88	Legislature
Nevada	High School Proficiency Program	1978-79	Legislature
New York	Regents Competency Tests	1979	State Board of Education
Ohio	Twelfth-Grade Proficiency Testing	1990	Legislature
South Carolina	Basic Skills Assessment Program	1988	Legislature
Tennessee	Proficiency Test	1981	Legislature
Texas	Assessment of Academic Skills	1990	Legislature
Virginia	Literacy Passport Test	1989-90	Legislature

Note: Some of these programs have actually been in existence for many years, such as the South Carolina and Michigan programs. The year listed here is the first time the program was administered for graduation purposes. The year for New Jersey is the year their current program was implemented; their previous program was implemented in 1981.

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